

RCA

VCR User's Guide



Changing Entertainment. Again.

VCR *plus*[®]
SILVER

VR556

Important Information

WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN.

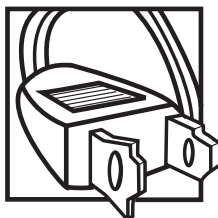
To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.



Caution: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Attention: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Cable TV Installer: This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Product Registration

Please fill out the product registration card and return it immediately. Returning the card allows us to contact you if needed.

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial and model numbers in case you need them. The numbers are located on the back of the VCR.

Model No. **VR556** _____

Serial No. _____

Purchase Date: _____

Dealer/Address/Phone: _____

Key Features Overview

Your VCR is equipped with features that will add to your recording experience. The following information summarizes a few of these features. Chapter 3 provides more information about the rest of the VCR's features and how to use them.



VCR Plus+® SILVER System

The VCR Plus+ system allows for simple timer recording programming by using a single PlusCode® programming number found in most TV program listings. The VCR Plus+ SILVER system simplifies timer recordings by automatically setting up and updating the VCR's clock and channel list for you.

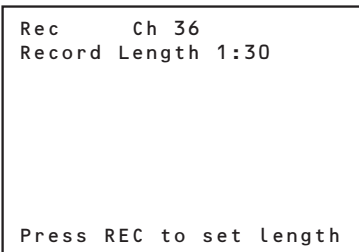
Requirements: Make sure that VCR Plus+ SILVER system is active, that Auto Channel Search and time set features are correct.



Unified Remote Control

Description: The VCR's remote control can operate most brands of TVs with a few programming steps. This remote control can operate most RCA, GE, and Proscan TVs without any programming at all.

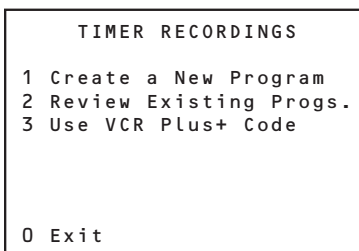
Requirements: Point the remote control at the active component to see if it can be operated. Program the remote if necessary following the steps in this manual.



Express Recording (XPR)

Description: XPR quickly records the remaining portion of a program already in progress. XPR is a great way to capture the end of a sporting event that has run into overtime or a live broadcast that runs long.

Requirements: Repeatedly press the Record button on the VCR front panel or remote control to set the desired duration of time to record.



Timer Recordings

Description: Your VCR allows you to program up to eight different future broadcasts to be recorded. You can catch a one-time, daily, or weekly broadcast to record.

Requirements: The VCR's clock must be set correctly. A tape with its safety tab in place and enough tape to record a program must be inserted into the VCR. For a cable box or satellite receiver, turn it on and tune it to the channel you want to record before the recording is to begin.

Introduction

ShowSaver™ Memory Protection

Description: Set timer programs are stored indefinitely using the VCR's permanent memory. This way, you'll never have to worry about losing your programs due to an extended power outage.

Requirements: Store a daily or weekly timer program in the VCR's memory.

Pro-Tect Plus™ Locking

Description: Locks the VCR so that buttons on the front panel and remote control won't operate the VCR. This feature protects timer programs from frustrating accidents such as being left on at the time of recording.

Requirements: Lock the VCR by pressing and holding the POWER button on the remote control for six seconds. The front panel display will blink for several seconds. The VCR unlocks by pressing and holding the POWER button on the remote control, again for six seconds. The front panel display will blink again and release the lock on the system.

SQPB S-VHS Quasi Playback

Description: Your VCR will be able to play back tapes recorded in S-VHS or S-VHS-ET mode (in VHS quality).

Requirements: Insert a tape recorded in S-VHS or S-VHS-ET mode and pressing the PLAY button on the remote control or PLAY•PAUSE on the VCR.

Table of Contents

Product Registration	i
Introduction	1
Key Features Overview	1
Connections & Setup	5
Things to Consider Before Connecting Components	6
Cable Considerations	6
Choose Your Connection	7
Using the RF Coaxial Cable to Connect the VCR to a TV	7
TV + VCR	8
TV + VCR + Satellite Receiver	9
Set the VCR's CH 3/4 Switch	11
Plug in the VCR	11
Put Batteries in the Remote Control	11
Turn on the TV and VCR	11
Tune the TV	11
Using the Remote Control to Navigate On-Screen Menus	12
Complete the QuickSet Guide	12
Accessing Menus	12
VCR Basics	13
Playing a Tape	13
Automatic Rewind	13
Tape Eject	13
Recording	13
Check the Safety Tab	13
Using the VCR's Menu System	15
Using On-Screen Menus to Set Up Features	16
Language	16
Cable Box Setup	16
VCR Channels List	17
Auto Channel Searching	17
Changing the Signal Type	18
Adding or Removing Channels	18
Time and Date	19
Auto Clock Set Feature	19
To Turn Auto Clock Set ON	19
Setting the Time Zone	19
Setting Daylight-Saving Time	20
Setting Time and Date Manually	20
Additional Set Up Features in the Preferences Menu	20
Remote VCR1/VCR2 Option	21
Auto Play	21
Auto TV/VCR	21
EnergySaver	22
Front Panel Brightness (VCR Display)	22
Tape Speed	22
Set Auto Repeat	23

Table of Contents

Using the Remote Control	25
Using the Remote Control	26
Buttons of the Remote Control	26
Using the INPUT Button	27
Operating a TV with the VCR's Remote Control	28
Do You Need to Program the Remote?	28
Programming the Remote Control	28
Operating the TV	28
Using the VCR's Features	31
Recording Features	32
Express Recording (XPR)	32
Timer Recording	33
Stopping a Timer Recording	33
Reviewing and Clearing Programs	33
VCR Plus+ SILVER System	34
Turning ON or OFF the Auto VCR Plus+ download	34
Mapping VCR Plus+ Channels Manually	35
VCR Plus+ System Worksheet	37
Copying and Editing Tapes Using Two VCRs	38
Picture Search Options	38
Forward and Reverse Search	38
Slow Motion	39
Frame Advance	39
Index Search	39
Go-To Search	40
Pro-Tect Plus™ Locking Feature	40
Tracking	41
Time Counter	41
On-Screen Displays	42
Other Information	43
Troubleshooting Tips	44
General VCR Problems	44
Recording Problems	45
Playback Problems	45
Specifications	47
Cleaning the VCR	47
Front Panel	48
Display Panel	49
Back Panel	50
RCA VCR Limited Warranty	51
How to Find Your TV's Video Input Channel	52
Advanced Connection	53
TV + VCR + Satellite Receiver	53
Glossary	54
Index	55

Connections & Setup

Chapter Overview:

- Things to Consider Before Connecting
- Cable Considerations
- Making the Connection
- Navigating On-Screen Menus
- Completing the QuickSet™ Guide
- Basic Recording

Changing Entertainment. Again.



Things to Consider Before Connecting Components

Protect Components From Power Surges

- Connect all components before plugging any power cords into the wall outlet.
- Always turn off the TV and other components before you connect or disconnect any cables.

Position Cables to Avoid Audio Hum or Interference

- Insert all cable plugs firmly into their jacks.
- Place any Audio/Video (A/V) cables to the side(s) of the TV's back panel instead of straight down the back after connecting components.
- Try not to coil any twin-lead cables and keep them away from all A/V cables as much as possible.
- Make sure all antennas and cables are properly grounded. Refer to the *Safety Tips* sheet packed with your unit for detailed information.

Protect Components From Overheating

- Never block ventilation slots in any component. Arrange the components so that air can circulate freely.
- Do not stack components.
- Allow adequate ventilation when placing components in a stand.
- Place an amplifier or satellite receiver on the top shelf of a stand so heated air rising from it will not flow around other components.

Cable Considerations

The RF coaxial cable supplied with your VCR carries both sound and picture information. This is the cable used in all connection diagrams in this chapter.

If your TV has A/V input jacks, you should use A/V cables (not supplied) to connect the VCR to the TV. A/V cables provide better picture and sound quality than an RF coaxial cable. If you would like to hook up your VCR using A/V cables, refer to the *Advanced Connection* information on page 53 in the *Other Information* chapter of the manual.



RF Coaxial Cable

Using the RF Coaxial Cable to Connect the VCR to a TV

The picture on the next page shows the RF coaxial cable supplied with your VCR. This will be the cable used for the basic connections presented in this chapter.

Notes: To hear stereo sound, you will need to purchase Audio/Video (A/V) cables (not provided) and connect the VCR to the TV. A/V jacks and cables also provide a superior image and sound quality. For details about using this advanced setup, see the instructions on page 53.

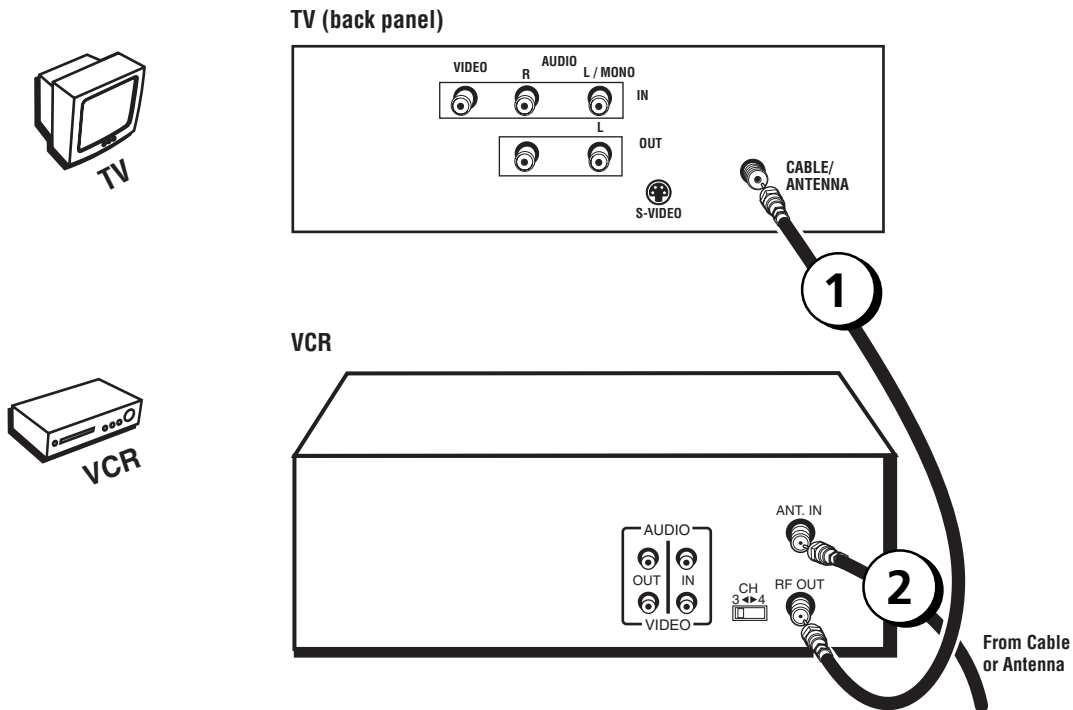
Using A/V jacks to connect the VCR to the TV requires tuning to the TV's Video Line Input to see the VCR's picture. For more information about finding your TV's Video Line Input, see page 52.

Choose Your Connection

There are several ways to hook up your VCR depending on the components connected. Please use the following chart to determine which connection is best for you and proceed to the appropriate page.

Components	Connection Title	Go To
  TV VCR	TV + VCR	page 8
   TV VCR Satellite	TV + VCR + Satellite Receiver	page 9
   TV VCR Cable Box	TV + VCR + Cable Box	page 10

Connections & Setup



TV + VCR

Note: Your television back panel may not look exactly like the model shown here.

1. Connect the VCR to the TV

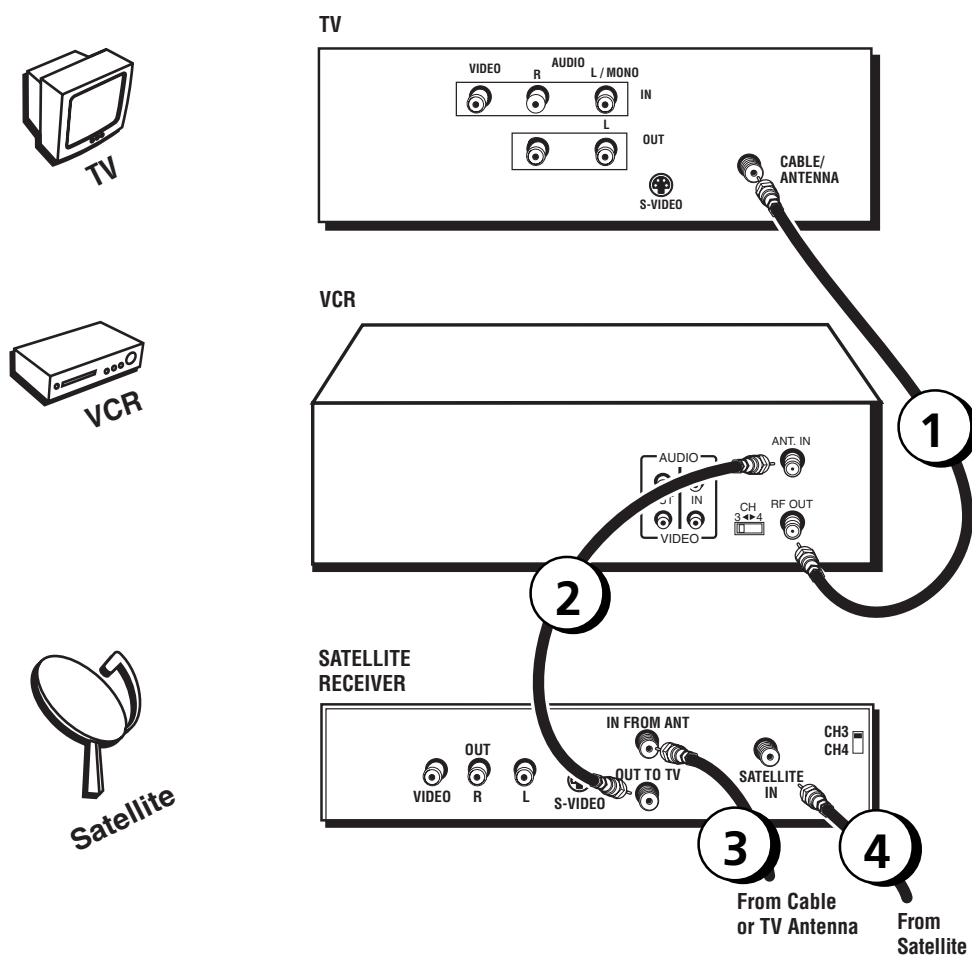
Connect one end of the supplied RF coaxial cable to the RF OUT jack on the back of the VCR and the other end to the TV's Antenna input jack.

2. Connect the antenna/cable feed to the VCR

Connect the satellite, cable, or antenna RF coaxial cable to the ANTIN jack on the back of the VCR.

NOTE: Flip the CH 3/4 switch on the back of the VCR to the channel that is *not* used in your area. This will be the channel that the TV must be tuned to in order to see the VCR's picture.

Go To Page 11



TV + VCR + Satellite Receiver

Note: Your television and satellite receiver back panel may not look exactly like the models shown here.

1. Connect the VCR to the TV

Connect one end of the supplied RF coaxial cable to the RF OUT jack on the back of the VCR and the other end to the TV's Antenna input jack.

2. Connect satellite receiver to the VCR

Connect an RF coaxial cable to the antenna output jack on the satellite receiver and to the ANT IN jack on the back of the VCR.

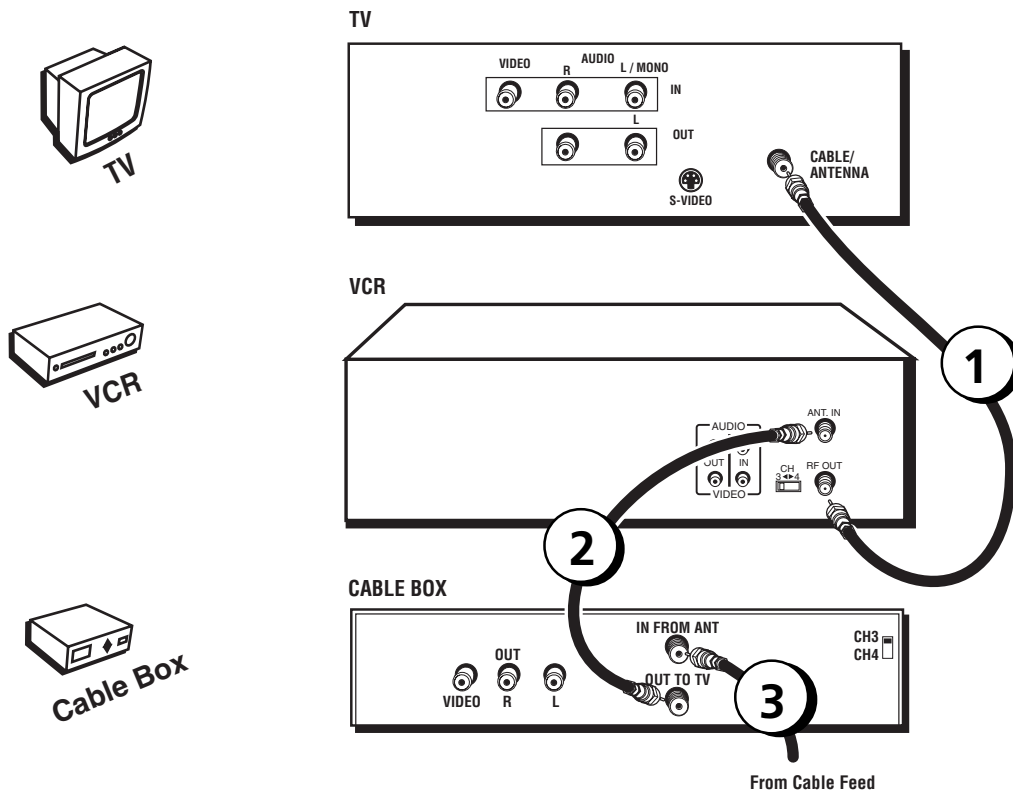
3. Connect the antenna to your satellite receiver

If necessary, connect an antenna or cable box RF coaxial cable to the antenna input jack on the satellite receiver.

4. Connect the satellite feed to the satellite receiver

Connect the satellite receiver's RF coaxial cable feed to the satellite input jack on the satellite receiver.

Go To Page 11



TV + VCR + Cable Box

Note: Your television and cable box back panel may not look exactly like the models shown here.

1. Connect the VCR to the TV

Connect one end of the supplied RF coaxial cable to the RF OUT jack on the back of the VCR and the other end to the TV's Antenna input jack.

2. Connect the cable box to the VCR

Connect one end of an RF coaxial cable to the cable box's antenna output jack and the other end to the ANTIN jack on the VCR.

3. Connect the cable feed to your cable box

Connect an RF coaxial cable feed to the antenna input jack on the cable box.

Go To Page 11

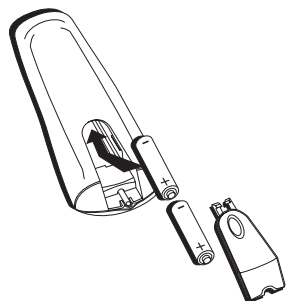
Set the VCR's CH 3/4 Switch

The CH 3/4 switch on back of the VCR determines what channel the TV must be tuned to see the VCR's image. Choose whichever channel is not used locally in your area.

Note: If you connected components using A/V jacks and cables, the VCR's signal must be viewed using the TV's Video Line Input. To find the Video Line Input, refer to the manual that came with the TV or see *How to Find Your TV's Video Line Input* on page 52 in the *Other Information* section of this manual.

Plug in the VCR

Your VCR's power cord has a plastic band strung through the blades. **Remove the plastic band before plugging the cord into the power outlet.** To remove the band, cut with a pair of scissors and pull it free of the blades. Once the plastic is removed, match the wide blade of the power cord to the wide slot in the AC outlet. Be sure to insert the plug completely.



Put Batteries in the Remote Control

1. Remove the battery compartment cover on the remote control.
2. Insert new batteries matching the polarities (+ and -) on the batteries with the diagram in the battery compartment.
3. Put the battery compartment cover back on the remote.

Turn on the TV and VCR

Turn on the TV and press the VCR button on the remote control to turn it on.

Note: If you have an RCA, GE, or Proscan TV, your VCR's remote control may be able to operate it without being programmed. Press the TV button on the remote control and then the ON•OFF button. If neither one turns on the TV, see *Using the Remote Control* starting on page 25 for details about programming the remote control to operate other brands of TVs.

Tune the TV

Tune the TV to the VCR viewing channel. The VCR viewing channel is channel 3, 4, or the TV's video line input.

- If you connect your VCR using RF coaxial cable only, turn the TV to channel 3 or 4 (whichever was set on the CH 3/4 switch).
- If you connected the VCR using A/V jacks and cables, select the TV's video line input. For more information see *How to Find the TV's Video Line Input* on page 52 in the *Other Information* section of this manual.

Using the Remote Control to Navigate On-Screen Menus

The technical term is “Navigation” – how you move through the on-screen menus. The theory is the same for all the menu screens; use the corresponding number button on the remote control to select it.

To choose an on-screen item, press the remote control’s corresponding number button.

Note: Selecting a menu item can take you to another menu, activate a choice, or activate a data entry field (such as the hour field in the Set Time menu).

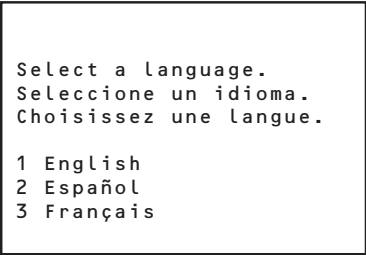
Complete the QuickSet Guide

The menu system in your VCR allows you to customize your preferences as well as use all the VCR’s features. To help you use the VCR as quickly as possible, there is an initial QuickSet Guide that walks you through several important setup steps at one time.

The first time you turn on the VCR, you will be able to set up available channels, time and date information, and more. The first menu you will see asks which language you prefer to have the on-screen menus appear in.

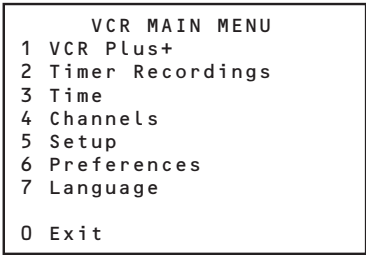
Note: With numbered menu choices, you can also press the corresponding number button on the remote control to automatically select it. In the case of the language menu, press 1 for English, 2 for Español (Spanish), or 3 for Français (French).

The remaining menus throughout the setup will appear in the language chosen. Just follow the step-by-step procedures until the QuickSet Guide is complete.



Select a language.
Seleccione un idioma.
Choisissez une langue.

- 1 English
- 2 Español
- 3 Français



VCR MAIN MENU

- 1 VCR Plus+
- 2 Timer Recordings
- 3 Time
- 4 Channels
- 5 Setup
- 6 Preferences
- 7 Language
- 0 Exit

All of the VCR’s menus are accessed through the Main Menu. Press the remote control’s MENU button to start.

Accessing Menus

The series of preferences that are set in the QuickSet Guide can also be handled individually using the VCR’s on-screen menu system. There are other settings not covered in the initial setup that are also handled using the on-screen menus.

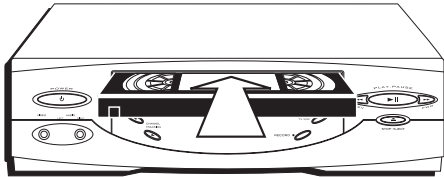
For example, if you decide to run the QuickSet Guide again, you can access the *Setup* menu by pressing the remote control’s MENU button. Once the *Main Menu* is displayed, press the 5 button to choose *Setup*. From there, you can start the QuickSet Guide from the beginning.

All on-screen menus are accessed the same way, starting in the *Main Menu* which is displayed by pressing the remote control’s MENU button.

Note: See chapter two, *Using On-Screen Menus*, for details about changing the VCR’s individual settings.

VCR Basics

Once your initial settings are complete, you can begin using your VCR. In order to begin, you must first understand some basic concepts.



Automatic Tracking

The VCR has automatic tracking which adjusts the picture when playing back a tape recorded on another VCR. To adjust tracking manually, use the TRACKING +/- buttons on the remote control.

Playing a Tape

1. Tune the TV to your VCR viewing channel (03, 04, or the video line input).
2. Insert a tape in the VCR.

If the Auto Play feature is set to ON, the tape automatically begins playback (if the safety tab on the tape is removed).

- Press FWD or REV (FORWARD or REVERSE on the remote control) to cue the tape at the desired starting position.
- Press PLAY (if necessary) to begin tape play.
- Press PAUSE for stop action.
- Press TRACKING up or down (TRACKING + or – on the remote control) to remove any streaks from the picture, if necessary.
- Press STOP to stop playback.

Automatic Rewind

The VCR automatically rewinds the tape if it reaches the end of the tape during playback. While rewinding, you can press the ON/OFF button and the VCR will turn off after finishing. If the tape has no safety tab, it will be ejected.

Tape Eject

Press the EJECT button on the VCR when stopped to eject the tape. You can also press and hold the remote control's STOP button for three seconds.

Recording

To Capture Programming with Basic Recording Methods:

1. Set the tape speed by pressing the SPEED button on the remote control (see *Recording Speed* on page 22 for information about recording speeds).
2. Press the RECORD button to begin recording.
3. Press the STOP button to halt recording.

If you just want to pause the recording for a short time (like during a commercial), press PAUSE instead of STOP.



Check the Safety Tab

No matter which recording option you use, make sure there is a tape in the VCR with its safety tab in place. You cannot record on a tape with its safety tab removed. If the safety tab is removed and you want to record, simply cover the hole with adhesive tape.

This page left blank intentionally

Using the VCR's Menu System

Chapter Overview:

- Setting Up the VCR's Preferences
- Using On-Screen Menus
- Cable Box Setup
- Setting Time and Date
- Setting VCR Preferences

Changing Entertainment. Again.



Using On-Screen Menus to Set Up Features

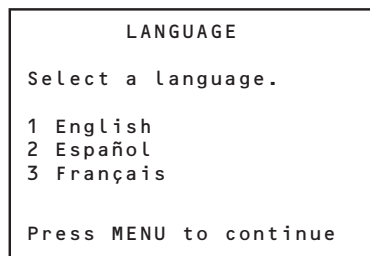
You set up many of the VCR's features by using the menu system as discussed in the previous section. Each feature that appears in the QuickSet Guide is explained in this section as well as a few other features you should set up to get the most out of your VCR.

Note: Not all the VCR screens are shown in this manual when explaining the features.

Language

Selecting your preferred language determines how the on-screen displays will appear. To change the language:

1. Press MENU to display the *VCR MAIN MENU*.
2. Press the 7 button to select *LANGUAGE*.
3. Select English, Spanish (Español), or French (Français).



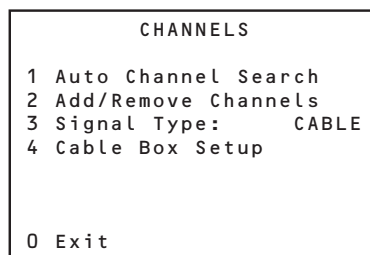
Is Something Missing?

These instructions will not show all of the step-by-step on-screen menus. Make sure to follow the instructions completely to get to the menus being discussed.

Cable Box Setup

This set up applies **only** when all channels are received through a cable box. In this case, the VCR will automatically enter the channel used to view cable box programming. Your VCR will use this channel for all future timer recordings.

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 4 to display the *CHANNELS* menu.
3. Press 5 to display the *CABLE BOX SETUP* menu.



```
CABLE BOX SETUP
Do you use your cable
box to receive ALL
channels or only SOME
channels?

1 ALL channels
2 Only SOME channels
3 Cancel setup
```

```
CABLE BOX SETUP
On what channel does
the VCR receive signals
from the cable box?
(usually 3, 4, or Video)

--

Enter 01-13 or INPUT
Press MENU to cancel
```

4. Select one of the three choices. If "ALL Channels" is selected, enter the output channel of the cable box (usually 03 or 04), or if A/V jacks connect the VCR to the TV, press the INPUT button on the VCR's remote control.
5. Once you complete the setup, the VCR confirms that it will now receive all signals on the designated channel.

VCR Channels List

Your VCR may come with a list of channels preset at the factory. Even though it may come with such a list, you may want to add or delete certain channels.

Note: If you use a cable box to view *all channels*, this step is not necessary.

Auto Channel Searching

Note: Use Auto Channel Search to place all available channels in memory.

If you ever change cable or antenna signals, you may need to run the Auto Channel Search feature again.

1. Press the MENU button to display the *VCR MAIN MENU*.
2. Press 4 to select *CHANNELS*.
3. Press 1 to select *AUTO CHANNEL SEARCH*.
4. Select one of the three options:

```
AUTO CHANNEL SEARCH
What type of signal
are you using?

1 Cable TV
2 Antenna
3 Detect Automatically

0 Cancel
```

Cable TV searches for cable stations.

Antenna searches for local broadcast stations.

Detect Automatically decides which input to use for you.

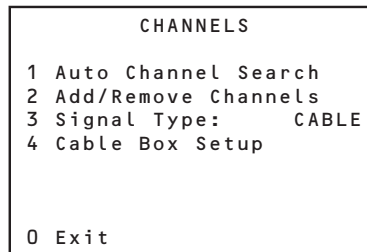
Notes: With *Detect Automatically*, a strong cable or antenna signal in your area may cause channels to be detected inaccurately. If this should happen, manually select the input signal for the system you have.

The VCR begins scanning for channels available in the area (taking about one-to-two minutes). When scanning is complete, the VCR tunes to the lowest channel available. After completing Auto Channel Search, pressing the remote control's CHAN + or - buttons should only select active channels.

Changing the Signal Type

This feature is useful if your cable signal goes out; it allows you to switch to a regular antenna for alternate television reception.

1. Press the MENU button to display the *VCR MAIN MENU*.
2. Press the 4 button to choose *CHANNELS*.
3. Press 3 to choose between *Signal Type: Cable and Antenna*. When finished, press 0 to exit back to the Main Menu and 0 again to exit to normal viewing.

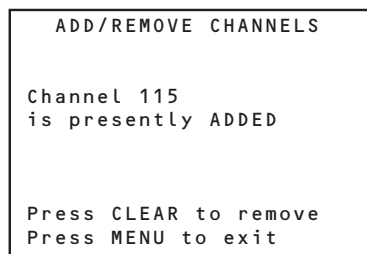


Adding or Removing Channels

You might want to add or remove channels after using Auto Channel Search, especially if there are weak signals or channels with content you don't care for.

1. Press the MENU button to display the *VCR MAIN MENU*.
2. Press 4 to choose *CHANNELS*.
3. Press 2 to choose *ADD/REMOVE CHANNELS*. To go to the channel you want to add or remove, use the remote control's CHANNEL + or - buttons or enter a specific channel number using the number buttons.

Once the desired channel is displayed, the on-screen menu will tell you if the channel is currently in the VCR's viewing list. Press the CLEAR button to remove a channel from the available channels list or press the INFO button to add it.



4. Once finished adding/deleting channels, press the MENU button to exit out of the menus.

Note: To view active channels, use the remote control's CHANNEL + and - buttons. You can also access channels not available in the active channel list by using the remote control's number buttons to enter the specific channel number.

Time and Date

Your VCR gives you two ways to set the time and date; manually or by using the Auto Clock Set feature. Using Auto Clock Set enables the time to be updated each time the VCR is **turned** off by using time and date information carried in certain broadcast signals.

Auto Clock Set Feature

The Auto Clock Set feature is set to *ON* by default at the factory. In the *ON* setting, the VCR looks for a channel carrying time data and updates the clock automatically. In order for Auto Clock Set to work properly though, certain steps must first be completed such as Auto Channel Search, setting the time zone, and setting the Daylight-Saving feature.

Notes: Auto Clock Set is available only in limited areas.

You must set available channels, time zone, and Daylight-Saving settings for Auto Clock Set to work.

When using Auto Clock Set with a cable box, the VCR will not reset the clock after a power outage unless the cable box is tuned to the channel carrying time data.

If the time does not automatically set after trying for ten minutes, manually set the time and date information using the *TIME* menu (see the next page for information on manually setting time and date information).

To Turn Auto Clock Set ON

Note: make sure that available channels, time zone, and Daylight-Saving features are set before turning on Auto Clock Set.

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 3 to choose *TIME*.
3. Press the 2 button repeatedly to toggle between *Auto Clock Set ON* and *OFF*.

```
TIME
1 Set Time and Date
2 Auto Clock Set:  ON
3 Set Time Zone
4 Set Daylight Saving

Time Data was found
on channel 20.

0 Exit
```

Setting the Time Zone

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 3 to choose *TIME*.
3. Press 3 to choose *SET TIME ZONE*.
4. Select your time zone by pressing the corresponding number button.

If you select *Automatic* for your time zone, the VCR sets the clock using the first time information it finds. If the time set is not correct, select another time zone or set the time and date through the menu system.

```
SET TIME ZONE
What is your Time Zone?
1 Eastern
2 Central
3 Mountain
4 Pacific
5 Alaska
6 Hawaii
7 Automatic
Press MENU to continue
```

Setting Daylight-Saving Time

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 3 to choose *TIME*.
3. Press 4 to choose *SET DAYLIGHT SAVING*.
4. Select the appropriate option.

Notes: DST stands for Daylight-Saving Time.

If you choose *Automatic* for the time zone, the VCR sets the clock using any DST information broadcast in the channel's signal.

```
SET DAYLIGHT SAVING

Does your area observe
Daylight Saving Time
from April to October?

1 Yes, DST is observed
2 No
3>Automatic
Press MENU to continue
```

Displaying Time and Date

Pressing the *INFO* button on the remote control or VCR displays the time and date on screen temporarily.

```
SET TIME AND DATE

Time --:--
      (hh:mm)

Date --/--/--

Press MENU to cancel
```

```
PREFERENCES
1 Remote Control: VCR1
2 Auto Play:      ON
3 Auto TV/VCR:   ON
4 EnergySaver:    2:00
5 Front Panel:    BRIGHT
6 Tape Speed:     SLP
7 Set Auto Repeat

0 Exit
```

The **PREFERENCES** menu allows changes to be made to a variety of different VCR features.

Setting Time and Date Manually

If Auto Clock Set was unsuccessful, set the time and date manually in the *TIME* menu. Auto Clock Set is automatically tuned off when time and date information is set this way.

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 3 to choose *TIME*.
3. Press 1 to choose *SET TIME AND DATE*.
4. Enter the data using the number buttons. Press 0 before single-digit numbers and follow the on-screen directions to exit the menus.

Additional Set Up Features in the Preferences Menu

Note: The features described on the following pages are all accessed through the *PREFERENCES* menu.

To Access the **PREFERENCES** menu:

1. Press MENU to display the *VCR MAIN MENU*.
2. Press 6 to select *PREFERENCES*.

You are now ready to select an item from the *PREFERENCES* menu to set up.

Remote VCR1/VCR2 Option

Some universal remote controls have buttons labeled VCR1 and VCR2. These remotes can operate up to two VCRs. If you have a universal remote control with this ability, your RCA VCR can be controlled with either the VCR1 or VCR2 button. See the documentation that came with your universal remote control for details about programming it to control your RCA VCR.

In the Preferences menu, press 1 to select the Remote Control feature. Then press the VCR2 button on your universal remote control to change the setting.

The VCR will only respond to the universal remote control's VCR2 button. To change the remote control setting back to VCR1, display the PREFERENCES menu, press 1, and then press the VCR1 button on the universal remote control.

Note: Remember you must press VCR1 or VCR2 on a universal remote control (not included)—whichever is selected in the menu—before the remote will operate the VCR.

Auto Play

With Auto Play tuned ON (the factory default setting), the VCR automatically starts playback when you insert a tape with its safety tab removed.

To Access Auto Play:

1. In the *PREFERENCES* menu, press 2 repeatedly to switch between *Auto Play: ON* and *OFF*.
 - Select *ON* if you want a tape with its safety tab removed to start playing automatically when inserted.
 - Select *OFF* if you *do not* want a tape with its safety tab removed to start playing automatically.

Auto TV/VCR

To control whether the VCR's TV/VCR setting changes automatically to VCR-viewing mode when turned on, use the Auto TV/VCR setting.

To Access Auto TV/VCR:

1. In the *PREFERENCES* menu, press 3 to repeatedly to toggle between *Auto TV/VCR: ON* and *OFF*.

Note: Pressing the TV•VCR button on the remote control will switch between VCR and TV-viewing modes. When in VCR-viewing mode, VCR is displayed on the front panel. The VCR indicator turns off when in TV-viewing mode.

- Select *ON* to switch VCR-viewing mode on automatically when the power is turned on. The VCR must be connected to the TV using the supplied RF coaxial cable.
- Select *OFF* to remain in the TV-viewing mode when the VCR is initially tuned on. Leaving Auto TV/VCR off is useful if you use A/V cables to connect the VCR to the TV and you watch the VCR's picture using the TV's video line input. This way, the antenna/cable signal will not be interrupted by the VCR.

Using On-Screen Menus

PREFERENCES		
1	Remote Control:	VCR1
2	Auto Play:	ON
3	Auto TV/VCR:	ON
4	EnergySaver:	2:00
5	Front Panel:	BRIGHT
6	Tape Speed:	SLP
7	Set Auto Repeat	
0	Exit	

The **PREFERENCES** menu allows changes to be made to a variety of different VCR features.

EnergySaver

By default, the VCR automatically turns off after two hours of inactivity. This can be changed in the **PREFERENCES** menu by pressing the 4 button repeatedly to change the time delay or to disable the feature altogether.

- Select **OFF** and the VCR will stay on until you shut it off
- Select **1:00**, **2:00**, or **3:00** and the VCR will turn off after one, two, or three hours of inactivity.

Thirty seconds before automatically shutting off, the VCR displays an on-screen message reading, *The VCR will turn off in 30 seconds. Press any key to cancel.* Pressing any remote control or VCR front panel button will halt the countdown.

If you use the VCR's tuner instead of your TV to view channels, you may want to turn off this feature.

Front Panel Brightness (VCR Display)

You can change the brightness level of the VCR's front panel display. In the **PREFERENCES** menu, press the 5 button repeatedly to toggle between options:

- **AUTO** means the display brightens when the VCR is on and dims when the VCR is off.
- **BRIGHT** keeps the display bright whether the VCR is on or off
- **DIM** keeps the display at a low brightness level whether the VCR is on or off.

Recording Speeds

SP (Standard Play)

Gives the best quality recording, but fewer programs can be recorded on the tape.

SLP (Super Long Play)

Gives three times the recording time of tapes recorded in SP mode.

Recording Times

Cassette	SP	SLP
T-120	2 Hr	6 Hr
T-160	2 Hr/40 Min	8 Hr

Tape Speed

You can choose a preferred tape speed for recording; either Standard Play (SP) or Super Long Play (SLP). The speed selected appears in the VCR's display panel and in timer and VCR Plus+ recording menus.

To Select a Preferred Tape Speed:

- In the **PREFERENCES** menu, press the 6 button repeatedly to switch between **SP** and **SLP** settings.

Note: For an explanation of recording speeds, see the note to the left.

To Override the Preferred Tape Speed:

- Press the **SPEED** button on the remote control.
- Set the tape speed in the timer or VCR Plus+ recording menu.

When you turn off the VCR, the tape speed reverts to the one you have selected as the default.

AUTO REPEAT

Set the length of time
you want the tape to
play in a repeating loop

Loop from 0:00 to --:--
(h:mm)

Press CLEAR to turn off
Press MENU to exit

Set Auto Repeat

A tape can be set to play the same segment over and over in a repeating loop with the Set Auto Repeat feature. Set Auto Repeat uses the VCR's memory counter to determine the duration of the loop.

In the *PREFERENCES* menu, press the 7 button to choose *Set Auto Repeat*. The *Set Auto Repeat* menu will ask for a loop end time to be specified:

- The CLEAR button will erase all three numbers entered and move the cursor back to the first position (hours).
- The *Press CLEAR to turn off* message will appear only after the first number has been entered into the end time.
- Auto Repeat is set back to --:-- by resetting the dialog box, ejecting a tape, powering off the VCR, power interruption, or by recording start.

When a duration time has been set:

- The VCR will automatically switch to rewind if the counter meets or goes past the set Auto Repeat duration.
- The VCR will automatically switch to playback during rewind if the counter equals or is less than 0:00.
- The Auto Repeat may be adjusted by setting the counter to 00:00. This can be done by pressing the CLEAR button while the tape counter is on screen or on the front panel display.
- The counter will not reset while rewinding in an Auto Repeat loop.

This page left blank intentionally

Using the Remote Control

Chapter Overview:

- Buttons on the Remote Control
- Programming the Remote Control to Operate Other TVs
- Using a Programmed Remote Control

Changing Entertainment. Again.



Using the Remote Control

The remote control is capable of controlling more than just your VCR. If you have compatible RCA, GE, or Proscan TV, you may be able to control it without having to program the remote. If you have another brand of TV, your VCR's remote control may be able to operate it once it has been programmed. This chapter offers details about programming the remote control and operating TVs.

In order for the VCR's remote control to operate a desired TV, you must first press the TV button on the remote control. To control the VCR, press the VCR button on the remote control. Pressing any remote control button will affect either the VCR or the TV depending on which is the active device the remote control is set to operate.

Buttons of the Remote Control

0-9 (Number buttons) Enter channel numbers, time settings, and on-screen display menu choices directly using the remote control.

To enter a two-digit channel, press the two digits. To enter a three-digit channel, press and hold the first digit for two seconds until two dashes appear to the right of the number; then add the second two. Example: to tune to channel 123, press and hold the 1 button for two seconds, then, when the dashes appear (--) press 2, then press 3.

CHAN (up and down) buttons Scan up or down through the VCR's stored channels. Press once to change the channel up or down; press and hold to continue changing channels.

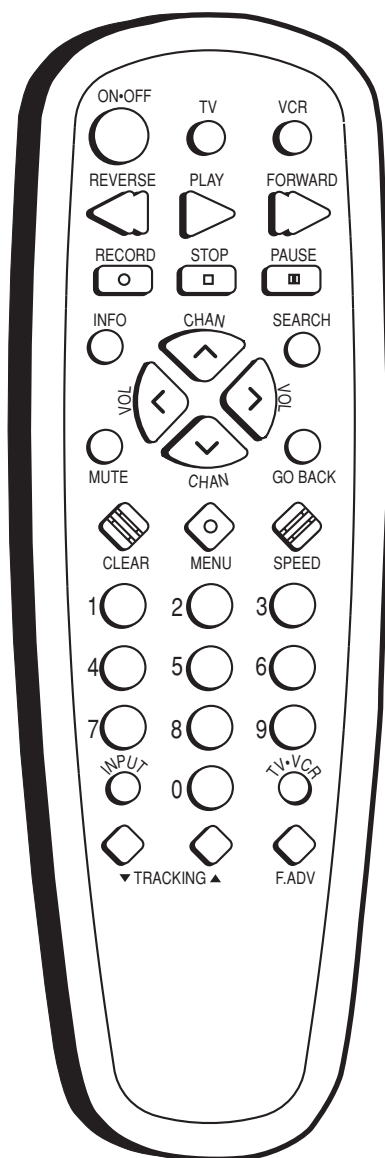
CLEAR Removes any menu or information display from the screen and returns the display view to normal. This button also resets the counter to 00:00 when the counter is displayed on-screen.

FORWARD Advances the tape in the VCR forward. In Play mode, the FORWARD button starts forward playback. In Stop mode, the FORWARD button starts fast-forwarding.

F. ADV (Frame Advance) Advances the tape one frame at a time during play-pause mode.

GO BACK Depending on which component the remote control is set to operate, this button returns the TV or VCR to the previously viewed channel.

INFO Shows the VCR's status displays on the TV screen. Press the INFO button once to display the day, date, time, and tape counter. Press the INFO button a second time to display just the tape counter. Press the INFO button a third time to clear the displays.



INPUT Selects between the video line inputs and the VCR's tuner. Video line input refers to the signal coming from another component (such as a camcorder) connected to the A/V input jacks on the back or front of the VCR. L1 designates the rear A/V jacks and L2 denotes the front jacks.

MENU Displays the *VCR MAIN MENU*. This is the first step when accessing any on-screen menu such as *LANGUAGE*, *PREFERENCES*, *TIMER RECORDINGS*, etc.

MUTE Lowers the TV volume to its minimum level. Press the MUTE button again to restore the TV's volume to its previous level.

ON•OFF Turns the power of the active device (either the TV or VCR) on or off.

PAUSE Pauses playback in VCR mode.

PLAY Starts tape playback in VCR mode.

RECORD Starts and stops recording in VCR mode.

REVERSE Rewinds a tape. In Playback mode, pressing and holding REVERSE starts reverse playback. In Stop mode, pressing REVERSE fast-rewinds.

SEARCH Displays *Index* and *Go-To Search* menus on-screen. Press this button once to display the *Index Search* menu and a second time to display the *Go-To Search* menu.

SPEED Overrides the set recording speed (either SP or SLP).

STOP Stops the active function of the VCR including tape playback, rewinding, and fast-forwarding. Pressing the STOP button for several seconds also ejects an inserted tape.

TRACKING up and down Allows the manual reduction of streaks which may appear on the picture during regular or slow-motion playback. Reduces picture "jitter" during play-pause mode.

TV Puts the remote control in TV-operating mode. This button will automatically turn on most RCA, GE, and Proscan TVs.

TV/VCR Toggles the VCR between TV and VCR-viewing modes.

VCR Puts the remote control in VCR-operating mode.

VOL (up and down) buttons Decreases or increases the TV volume.

Using the INPUT Button

Use the INPUT button to toggle through the available video line input sources (L1, L2, and regular broadcasting signals) and regular broadcast signals. Video line input allows you to view the image from a connected device (like a camcorder) through the VCR.

1. Press the remote control's VCR button to place the remote control in VCR-controlling mode. Make sure that the VCR is tuned ON.
2. Press the remote control's INPUT button to tune to the video line input source. L1 represents the rear A/V jacks and L2 represents the front A/V jacks.
3. Press the INPUT button again to tune back to the broadcast signal you were previously watching through the VCR.

Using the Remote Control

Operating a TV with the VCR's Remote Control

The unified remote control that came with your VCR can be programmed to operate most brands of remote-controllable TVs and should already control most RCA, GE, and Proscan models without programming.

Do You Need to Program the Remote?

To determine whether the remote control needs to be programmed to operate your TV, turn the TV on, point the remote control at it, then press the remote control's TV button (this puts the remote control into TV operating mode and should automatically turn on most RCA, GE, and Proscan TVs). Press the remote control's ON•OFF button to see if the TV responds to the command. If not, the remote control needs to be programmed to control that model TV.

Programming the Remote Control

To program your remote control, you must use the code list on the next page to look up the brand name of your TV and the code(s) that brand uses.

Notes: This remote control may not operate all models of the brands that are shown in the code list.

Note the difference between the TV and VCR on-screen displays to see which one the remote is operating.

1. Turn on the TV.
2. Find your TV brand and code number(s) in the code list on the next page.
3. Press and hold the TV button on the remote control.
4. Enter the code from the code list.
5. Release the TV button, then press the CHAN up or down button. If the TV responds to the remote control's command, the remote is programmed.
6. If the TV does not respond, repeat these steps using the next code listed for your TV's brand.

Operating the TV

After you set up the remote control, see which buttons operate your TV

1. Point the remote control at the TV, and press the TV button. If the TV does not turn on, press the TV button and then press the ON • OFF button.
2. You may want to experiment to see which buttons operate your TV. Try pressing buttons, such as VOL and MUTE. See the button descriptions in this chapter for details about what each remote control button does.

TV Codes

Akai	03	NAD	07
AOC	06,12	NEC	06
Candle	06	Panasonic	04, 08, 11
Citizen	06	Philco	04, 06, 12
Colortyme	06	Philips	03, 04, 06, 12
Concerto	06	Pioneer	06
Curtis Mathes	01,06	Portland	06, 12
Daewoo	06,12	Proscan	01
Daytron	06	Proton	06
Electrohome	06,12	Quasar	11
Emerson	06	Radio Shack	01, 05, 13
Envision	05, 06	RCA	01, 06, 12
Fisher	05, 08	Realistic	05
GE	00, 01, 06, 11	Sampo	06
Goldstar	06,12	Samsung	06, 09, 12
Hallmark	06	Sanyo	05, 08
Hitachi	06,14	Sears	01, 05, 06, 07, 08, 10, 12
Infinity	04	Sharp	06,13
J C Penney	00, 01, 06, 09, 12	Sony	03
JBL	04	Soundesign	06
Jensen	06	Sylvania	04, 06, 12
JVC	10, 11	Technics	11
Kawasho	03, 06	Techwood	06
Kenwood	06, 12	Teknika	06
Loewe	04	TMK	06
Luxman	06	Toshiba	05, 07, 08, 09
LXI	04, 05, 07	Universal	00
Magnavox	04, 06, 12	Victor	10
Marantz	04, 06	Wards	00, 01, 04, 06, 12, 13
MGA	06, 12	Yamaha	12
Mitsubishi	06, 12	Zenith	02
MTC	06		

This page left blank intentionally

Using the VCR's Features

Chapter Overview:

- Recording
- Express Recording (XPR)
- Timer Recordings
- Using the VCR Plus+ SILVER System
- Copying and Editing Tapes

Changing Entertainment. Again.



Recording Features

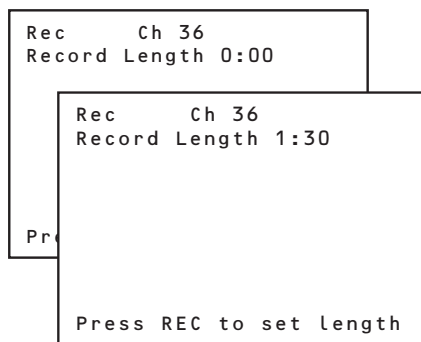
Your VCR provides many ways to capture programming:

1. **Recording** lets you press one button to record a program.
2. **Express Recording (XPR)** allows recording to start while a program is being watched. This feature automatically stops recording after a designated period of time.
3. **Timer Recording** program the VCR for a daily, weekly, or one-time recording which will automatically start and stop at the times you set.
4. **Timer Recording with VCR Plus+ System** program the VCR by entering a PlusCode programming number found in most TV program listings.

Express Recording (XPR)

Use XPR to quickly record the remaining portion of a program being watched. XPR is a great way to capture the end of a sporting event that has run into overtime or a live broadcast that runs long.

XPR works in 30-minute increments. You can capture the last 30, 60, 90, etc. minutes of programming (providing on tape length), up to four hours total.



To Activate XPR:

1. If necessary, turn on the VCR and tune it to the channel with the desired programming.
2. If necessary, insert a tape with its safety tab in place into the VCR. Make sure it is cued to record at the proper starting point.
Note: To override the preferred tape speed setting, press the SPEED button on the remote control repeatedly to toggle between SP and SLP choices.
3. Press the RECORD button on the remote control or VCR front panel to start recording.
4. Repeatedly press the RECORD button to set up the recording duration.
 - Each press of the RECORD button adds 30 minutes of recording time.
 - The VCR automatically turns off after recording for the set time.
 - To stop an XPR recording, press and hold the STOP button on the remote control or VCR front panel for several seconds until *STOP* appears on the VCR on-screen display.

Timer Recording

You can program up to eight different broadcasts to be recorded.

Notes— In order for a timer recording to work:

- The VCR's clock must be set correctly.
- Insert a tape with its safety tab in place and enough tape to record the program.
- The output of your cable box appears in the channel item of the *Timer Recording* menu (if you've set up the VCR for a cable box for all channels).
- **PROGRAMS OVERLAP** appears if two programs whose times overlap are entered.
- ⌚ appears in the display when you turn off the VCR and a timer recording has been set. ⌚ flashes if there is no tape in the VCR.
- For a cable box or satellite receiver, turn it on and tune it to the channel you want to record before the recording is to begin.

To Set Up to as Many as Eight Timer Recording Programs:

1. Press the MENU button to display the *VCR MAIN MENU*.
2. Press the 2 button to choose *TIMER RECORDINGS*.
3. Press the 1 button to select *Create a New Program*.
4. Select how often you want the program to record.
5. Enter the data for the program with the number buttons.

The data includes the channel number (press INPUT to select the video line input if using A/V jacks to connect the VCR to the TV), and start and end times (including AM or PM). The start date is automatically entered based on the VCR clock. Both the recording date and speed can be changed.

6. Review the information to make sure it is correct.
7. Press the MENU button to save.

Stopping a Timer Recording

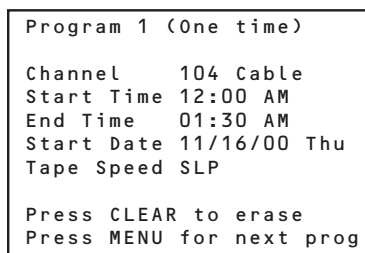
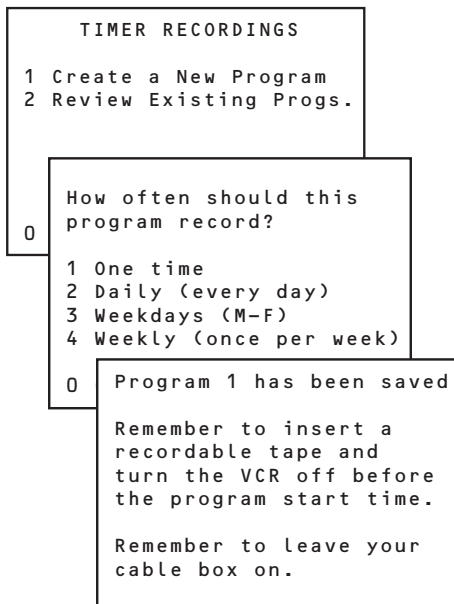
To stop or cancel a timer recording in progress (even an Express Recording):

Press and hold the STOP button for several seconds until **STOP** appears on screen.

Reviewing and Clearing Programs

To review programs that you have already set up:

1. Press the 2 button when the *VCR MAIN MENU* is on-screen to choose *TIMER RECORDINGS*.
2. Press the 2 button to choose *Review Existing Progs.*
3. Press CLEAR to erase or MENU to see the next saved timer recording program.



VCR Plus+ SILVER System

The VCR Plus+ SILVER system makes VCR set up easier by setting and updating the clock and channel list for you automatically. During the first-time QuickSet Guide setup, the VCR prompts you to enter your zip code. Soon after the VCR clock will set itself and your VCR Plus+ system channel list will be input for you.

Time, date, and VCR Plus+ system information are downloaded from participating TV stations over your antenna or cable system. Time and date information are updated each time the VCR is turned off (and after every power interruption). So, when your TV stations or cable company update their lineups, your VCR will get the most current channel list automatically, freeing you from having to manually change the channel list yourself.

If your VCR Plus+ SILVER system fails to download the proper information for any reason, you can always manually map the channels. You can also turn off AUTO VCR Plus+ if you keep getting prompts about *multiple cable* services by pressing the 2 button in the *VCR Plus+ SETUP* menu.

```
VCR PLUS+ SETUP
Last automatic setup
was unsuccessful.
Would you like to:

1 Try again
2 Finish setup manually
3 Cancel the auto setup
```

```
VCR PLUS+ SETUP
1 Set channel lists
2 Auto VCR Plus+:  ON

VCR Plus+ data was not
found.
```

Turning ON or OFF the Auto VCR Plus+ download

If the automatic VCR Plus+ download continuously fails for any reason, you will see the prompt to the left.

If you decide to turn off Auto VCR Plus+ all together you can do this by:

1. Press the MENU button on the remote control to access the *VCR MAIN MENU*.
2. Press 4 to access the *CHANNELS* menu.
3. Press 4 to access the *VCR Plus+ Setup* menu.
4. Pressing 1 will take you to a screen to manually map VCR Plus+ channels. Pressing 2 will toggle between *Auto VCR Plus+: ON* and *OFF*.

Make sure this feature is turned off if you continually get *fail to download* prompts and map the channels manually.

Mapping VCR Plus+ Channels Manually

Using the VCR Plus+ SIVER system can make taping timer recordings for cable or off-air antenna easier. If your VCR Plus+ SIVER system setup failed during the QuickSet, then you will need to map the channels for your local service manually. A worksheet and abbreviated codes for typical cable services in the U.S. and Canada are provided.

1. Press the MENU button to display the *VCR MAIN MENU*.
2. Press the 4 button to choose *CHANNELS*.
3. Press the 4 button to choose *VCR Plus+ Setup*.
4. Press 1 to display the *Set Channel Lists* menu.

```
VCR PLUS+ SETUP
1 Set channel lists
2 Auto VCR Plus+:  ON

VCR Plus+ data was not
found.
```

```
VCR+ Channel  My Channel
5          --
4          --
3 -> -> -> --
2          --
1          --

Use CH+/- to select
Press 0-9 to change
Press MENU to save
```

5. Enter the data following the on-screen directions using your worksheet.

```
VCR+ Channel  My Channel
5          46
4          --
3 -> -> -> 23
2          --
1          --

Use CH+/- to select
Press 0-9 to change
Press MENU to save
```

(Screen shown is for an example only.)

Two-Digit VCR Plus+ System Channel Numbers for Cable TV (USA List)

35.....	American Movie Classics
39.....	Arts &-Entertainment
57.....	Black Entertainment
54.....	Bravo
42.....	Cable News Network
45.....	Cinemax
98.....	Cinemax 2
37.....	The Discovery Channel
53.....	The Disney Channel
63.....	Entertainment Television
34.....	ESPN Sports Network
47.....	The Family Channel
33.....	Home Box Office
95.....	Home Box Office 2
96.....	Home Box Office 3
51.....	The Learning Channel
46.....	Lifetime
58.....	The Movie Channel
48.....	Music Television
49.....	The Nashville Network
38.....	Nickelodeon
64.....	Nostalgia Television
99.....	Quality Value Cable
41.....	Showtime
97.....	Showtime 2
59.....	Sports Channel
52.....	Turner Network Television
44.....	USA-Network
62.....	Video Hits 1
93.....	Viewer's Choice 1
94.....	Viewer's Choice 2
55.....	WGN Chicago
43.....	WTBS Atlanta
60.....	WWOR-New York

Two-Digit VCR Plus+ System Channel Numbers for Cable TV (Canadian List)

67.....	Allarcom Pay Television/ Superchannel
44.....	Arts & Entertainment
72.....	Cable News Network- Headline News
61.....	Cable News Network
70.....	Canadian Home Shopping Network
56.....	Canal Famille
69.....	Cathay International Television Inc.
68.....	Chinavision Canada Corp
60.....	Country Music Television
63.....	Family Channel
62.....	First Choice
96.....	First Choice Two
97.....	First Choice Three
99.....	First Choice Four
90.....	House of Commons
91.....	La Chaine Francaise
51.....	The Learning Channel
65.....	MeteoMedia/The Weather Network
48.....	MuchMusic Network
55.....	MusiquePlus
52.....	Nashville Network
73.....	Newsworld/CBC
53.....	Le Reseau des Sports
43.....	The Sports Network
64.....	Super Ecran
37.....	Super Ecran B
98.....	Super Ecran C
66.....	Telatino Network
46.....	TV5 Montreal
92.....	Viewer's Choice 1
93.....	Viewer's Choice 2
94.....	Viewer's Choice 3
95.....	Viewer's Choice 4
71.....	Vision TV: Canada's Faith Network
38.....	Youth TV, Canada Inc.

Note: Refer to your local television program listings for a complete VCR Plus+ channel list for your viewing area or contact your cable company. Using the list may save you some time.

VCR Plus+ System Worksheet

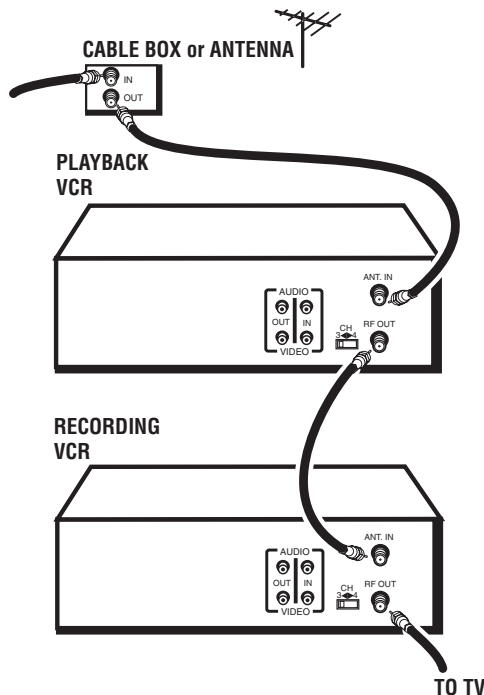
[illegible]

***Check your local or cable listings for the channel number you receive this station on.**

****Check your local listings for broadcast or VCR Plus+ channel number assigned.**

Caution:

The unauthorized recording of satellite broadcasts, television programs, or other copyrighted materials may infringe the rights of others.



Insert Tape:

Don't forget to insert a recorded tape when using the search features.

Copying and Editing Tapes Using Two VCRs

Use one VCR as the *playback* VCR and the other as the *recording* VCR.

1. Turn on the TV and VCRs.
2. Tune the TV to the VCR viewing channel (either 03, 04, or the video line input).
3. If you connected the VCR using the RF coaxial cable jacks, tune the *recording* VCR to channel 03 or 04 (whichever is selected on the *playback* VCR's CH. 3/4 switch on the back panel).

If you have connected your VCR using the A/V jacks press the INPUT button on the *recording* VCR's remote control to select the video line input. Select L1 for the jacks on the back of the VCR or L2 if using the jacks on the front.

4. Insert the tape you want to copy into the *playback* VCR. Insert a blank tape with its safety tab in place into the *recording* VCR.
5. Press PLAY on the *playback* VCR to begin playback. When you reach the point on the tape or program where you want to begin copying, press PAUSE. You may need to adjust the tracking.
6. Press the RECORD button, then press PAUSE on the *recording* VCR.
7. Press the PAUSE buttons on *both* VCRs at the same time to begin copying the tape.
8. To edit segments that you do not want to copy:
 - Press the PAUSE button on the *recording* VCR to pause copying.
 - Locate the next segment you want to copy on the *playback* VCR by using the FWD, REV, and PLAY buttons, and then cue using the PAUSE button.
 - Press the PAUSE button on *both* VCRs at the same time to resume copying.
9. Press the STOP button on *both* VCRs when finished.

Picture Search Options

The most basic way to search during playback is using the FORWARD or REVERSE buttons (FWD and REV on the VCR). This section contains several other options available for searching a tape.

Forward and Reverse Search

You can search a tape during playback. Sound is tuned off during picture search.

1. Press the FORWARD button (FWD on the VCR) to search forward or the REVERSE button (REV on the VCR) to search backward.
2. Press the FORWARD (FWD), REVERSE (REV), or PLAY button to return to normal playback.

Slow Motion

You can view a tape during play or play-pause mode using slow motion.

1. In pause mode, press the FORWARD or REVERSE button to start slow-motion playback.
2. Press the FORWARD button to increase search speed or the REVERSE button to decrease search speed.
3. Use the TRACKING + or – buttons to remove any streaks from the picture.
4. Press the PLAY button to return to normal playback.

The VCR switches automatically from slow-motion playback to stop after a few minutes.

Frame Advance

Frame Advance lets you view stop-action one frame after another during playback.

To Start Frame Advance:

1. Press the PAUSE button on the remote (PLAY/PAUSE on the VCR) to freeze the action.
2. Press F. ADV on the remote control each time you want to view the next frame of the scene.
3. Press the PAUSE or PLAY button on the remote control (PLAY/PAUSE on the VCR) to return to normal playback.

Index Search

The VCR has a *VHS Index Search System* that automatically records an index mark on the tape every time you start a recording. During playback you can locate the program you want to play by the number of index marks or by scanning. The VCR will search forward or reverse from the location you are on the tape.

To Search:

1. Press STOP.
2. Press SEARCH on the remote to display the *INDEX SEARCH* screen on the TV screen.
3. If you want to search through a certain number of index marks, press two number buttons to enter the number of marks you want to search. Press CLEAR on the remote to correct an entry.

```
INDEX SEARCH
Press REV or FWD
to begin scanning
OR
enter a specific
index number
--
Press SEARCH to exit
```

```
INDEX SEARCH
Searching for
index number 12...

Press STOP to cancel
```

Continues on the Next Page

```
INDEX SEARCH

Searching for
index marks...

Press STOP to cancel
```

4. Press FORWARD (FWD) to search forward or REVERSE (REV) to search in reverse. The VCR will locate your index mark and begin playback. If you did not enter a specific index number the VCR will locate the next index mark and begin playback.

5. Press STOP to stop Index Searching.

Notes: Certain index marks may be missed by the VCR including:

- Marks too close to the current location of the tape.
- Marks at the beginning of a recording lasting five minutes or less.
- Index marks that start at the beginning of the tape.

```
GO-TO SEARCH

Current tape counter is
2:17:25

Press REV or FWD
to go to --:--:00

Press SEARCH to exit
```

Go-To Search

The Go-To Search feature enables the VCR to quickly locate a counter reading anywhere on the tape. When the VCR locates the counter reading, it will begin playback.

1. Press the STOP button.
2. Repeatedly press the SEARCH button on the remote control until the *GO-TO SEARCH* menu appears on the screen.
3. Use the number buttons to enter the hour and/or minute of the counter reading you want the VCR to go to. If necessary, press the CLEAR button on the remote control to correct an entry.
4. Press the FORWARD button to search ahead or the REVERSE button to search behind.
5. Press the STOP button to end a Go-To Search.

Pro-Tect Plus™ Locking Feature

To protect set timer recordings and disable the VCR for use, the unit can be locked so that the buttons on the front panel or remote control don't work.

- **To Lock:** Press and hold either the remote control's ON•OFF or VCR button until the front panel display flashes.
- **To Unlock:** Press and hold either the remote control's ON•OFF or VCR button until the front panel display flashes for several seconds. Unlocking is the only way to turn on and use the VCR.

Tracking

Your VCR has automatic tracking which removes streaks and “noise” from the picture. Automatic tracking is activated when you insert a tape or turn on the VCR. Occasionally you may need to manually adjust tracking, especially if the tape was recorded on a different VCR. Use the TRACKING +/- buttons to remove streaks and noise. You can also use tracking when pausing a tape to reduce the noise of the still picture.

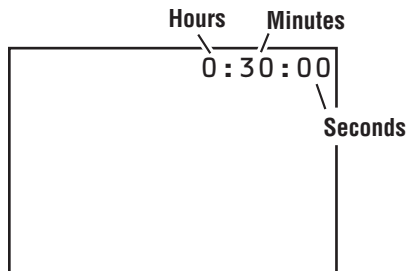
When manually adjusting the picture, automatic tracking is turned off. To turn automatic tracking back on, eject the tape and insert it.

Tracking has no effect when recording—only during playback.

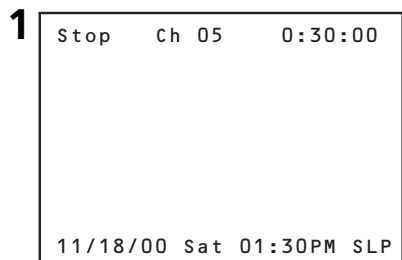
Time Counter

The time counter shows the actual time used in recording or playing back a tape. The time counter helps locate the beginning or end of recorded events. It resets to 0:00:00 whenever a tape is ejected from the VCR.

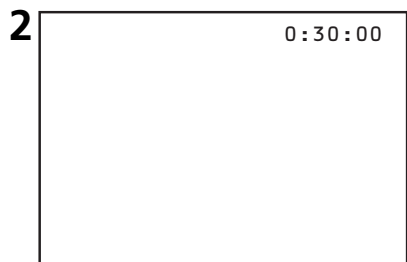
For example, if you record a 30-minute program at the beginning of a tape, rewind it, and then want to go to the end of the first program to start another recording:



1. Press the INFO button **twice** to display only the time counter
2. Press the CLEAR button to reset the time counter to 0:00:00.
3. Press the FORWARD button (FWD on the VCR) to advance a tape until the time counter reads 0:30:00.
4. Press STOP. This is the approximate end of a 30-minute program (you may want to press PLAY to verify). When the tape is cued correctly, you can begin recording.
5. Press the INFO button to remove the time counter from the screen and return to the normal display mode.



On-screen display (times out)



Time counter only (does not time out)



No displays will appear (useful for dubbing)

On-Screen Displays

The INFO button displays the status of the VCR (Stop, Play Record, etc.) as well as the channel number, time counter position, date, time, and tape speed on the TV screen.

Note: The date and time must be set before they can be displayed.

1. Press the INFO button to show the on-screen displays. The current time is displayed in the VCR's front panel.
2. Press INFO again to have only the time counter remain on the screen. The time counter is also displayed in the VCR's front panel.
3. Press INFO again to have no displays appear on the TV screen.
4. Press INFO again to return to the normal display. The current time is displayed in the VCR's display panel.

Note: Turning off the VCR also resets the displays.

Other Information

Chapter Overview:

- Troubleshooting
- Specifications
- Care and Cleaning
- Front, Rear, and Display Panel Diagram
- Warranty Information
- Finding the TV's Video Line Input
- Glossary
- Index

Changing Entertainment. Again.



Troubleshooting Tips

In this section, you will find answers to common recording, playback, and general VCR questions. Consulting with this section first when there is a problem may help you answer common questions.

General VCR Problems

No power

- Check to make sure it is plugged into an operating outlet.
- Check to make sure your connections are correct.

VCR does not respond to remote

- Check to make sure there are no objects between the VCR and remote.
- The batteries may need changing.

Poor or no picture for normal TV viewing

- Check to make sure the VCR indicator is off.
- Check to make sure the TV is switched to an active channel.
- Check to make sure the antenna connections are secure and correct.

Rewind does not operate

- Check to make sure the tape is not already rewound.

Clock shows incorrect time or date

- Power interruption.
- Check to make sure the clock is set accurately (check AM/PM and date).
- Check Daylight-Saving setting. Clock may have adjusted for daylight-saving.
- Time did not adjust for Daylight-Saving time
- Check to make sure daylight-saving feature is set correctly.

VCR makes noise when stopped

- VCR is removing tape from heads. This is normal. The head cylinder inside the VCR will continue to rotate for a few minutes after you put the VCR in the stop mode.

Cannot select channels over 69

- Cable channels over 69 can only be selected if Signal Type: CABLE/ANTENNA feature is set to CABLE.

Timer (⌚) indicator flashes

- Check to make sure there is a cassette in the VCR when a timer recording is set.

On-screen menus appear in English, French, or Spanish

- Check LANGUAGE feature.

Recording Problems

Will not record

- Check to make sure there is a tape in the VCR.
- Try ejecting and reinserting the cassette.
- Check to make sure the tape is not broken.
- Check to make sure the VCR is not in pause mode. Press PAUSE or PLAY to return to normal playback.
- Check the Pro-Tect Plus™ feature.

VCR Plus+ or timer recording not made or wrong program recorded

- Check to make sure the correct PlusCode programming number is entered.
- Check to make sure the program was entered correctly (wrong channel or times).
- Check to make sure the cable box or satellite receiver was tuned on when recording was to begin.
- Power interruption. Reset the clock.
- Check to see if time and date are correct – including AM/PM.
- Check to make sure the program did not exceed the tape's length or the tape was not rewound beforehand.
- Check to make sure the VCR was tuned off at the time recording was to start.
- Check to make sure there was a tape in the VCR and the cassette's safety tab was intact.
- VCR ejects cassette when the end of the tape is reached during a timer recording.
- Check to make sure VCR Plus+ setup was completed correctly.

Will not record

- Check to make sure the safety tab is intact.
- Check to make sure the VCR is not in the line mode. Press INPUT on the remote.

Playback Problems

Snowy or no picture during playback

- Press TV•VCR to turn VCR indicator on.
- Check TV channel selected (3 or 4) to make sure it matches the channel selected with CH. 3/4 switch on the back of the VCR.
- Check to make sure the TV's fine tuning is correct for the channel selected.
- Check video cable connections between VCR and TV monitor
- Check to make sure the TV monitor is set to Video Input (see "How to Find Your TV's Video Input Channel" in this section of the manual for detailed information).
- Try another tape.
- Some snow/streaks are normal during search, stop action, frame advance, and slow-motion playback.

Streaks in picture during normal playback

- Press one of the TRACKING buttons to move streaks up or down for the best picture.
- Check to make sure the tape is of good quality and not worn out.

Other Information

Time counter not working or time counter not working in search modes

- The time counter does not advance during unrecorded portions of tape. When an unrecorded segment of tape is encountered, the time counter will hold its count until recorded material is detected again.
- A minus (–) will appear in front of the time if you rewind the tape farther back than a counter reading of 0:00:00.
- The time counter disappears during search; this is normal.

Will not play

- Check to make sure there is a tape in the VCR.
- Try ejecting and reinserting the cassette.
- Check to make sure the tape is not broken.
- Check to make sure the VCR is not in pause mode. Press PAUSE or PLAY to return to normal playback.
- Check the Pro-Tect Plus™ feature.

Will not Auto Channel Search active channels correctly

- Check to make sure the antenna connections are secure and correct.
- Check to make sure the Signal Type: CABLE/ANTENNA feature is set correctly.
- If Detect Automatically was selected for the Signal Type in the AUTO CHANNEL SEARCH menu, try using either CABLE TV or ANTENNA instead.
- May not be necessary if using a cable box for all channels. Contact your local cable company for more information.

Tape plays back in slow motion

- Press PLAY to return to normal playback.

Cassette with safety tab removed does not start to play automatically

- Check to make sure the AUTO PLAY ON/OFF feature is set to ON.

Time counter disappears during searching

- This is normal.

Specifications

Format:	VHS
Record/Playback System:	Video: 4-head Audio: VHS Mono record/playback system
Video Signal System:	EIA standard: NTSC color
Antenna:	75-ohm external VHF/UHF combined antenna terminal
Tuner:	USA: 181 channels capability* (125 cable channels) Canada: 178 channels capability* (122 cable channels)
Type:	AutoProgramming frequency synthesis
Power Requirement:	120V AC, 60 Hz
Power Consumption:	17 watts (standby < 3 watts)
Dimensions:	3.64 inches high (91 mm) 14.4 inches wide (360 mm) 9.56 inches deep (239 mm)
Weight:	6.4 pounds (2.9 kg)
Storage Temperature Range:	- 22°F to +149°F (-30°C to +65°C)
Operating Temperature Range:	+41°F to +104°F (+5°C to +40°C)

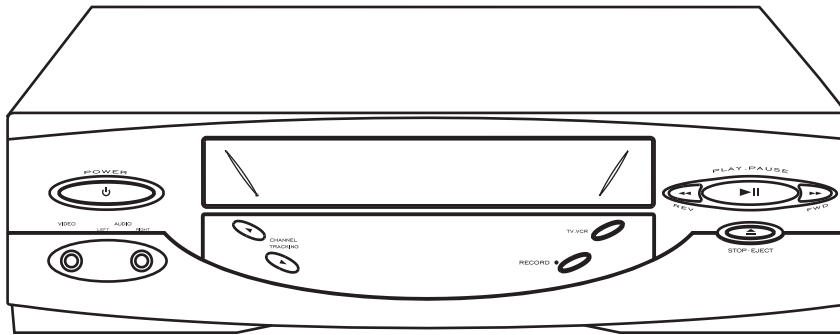
*Check your cable company's compatibility requirements.

Cleaning the VCR

Use a soft cloth or dusting attachment of your vacuum cleaner to dust your VCR. Remove dust from the ventilation holes on the top, back, sides, and bottom of the VCR and all connected components.

Plastic surfaces are easily scratched and can be mared by alcohol and various solvents. Avoid excessive use of oil-based furniture polishes since the materials used in the cabinet will accumulate more dust. We recommend using a nonabrasive, antistatic cleaner and polisher.

Other Information



Front Panel

CHANNEL•TRACKING and Up (▲) and Down (▼) Selects next higher or lower channel in the VCR's channel memory. Adjusts tracking when a tape is playing.

FWD Fast-forwards the tape when the VCR is in stop mode. Searches the picture forward during playback. Starts slow motion playback during play-pause mode and increases slow-motion speed.

PLAY•PAUSE Plays a tape. Pauses action for viewing when pressed during playback. Pauses during recording to prevent recording of unwanted scenes.

POWER Turns the VCR on or off.

RECORD Starts VCR recording. Used for Express Recording.

REV Rewinds the tape when the VCR is stopped. Searches the picture in reverse during playback. Starts slow motion during play-pause and decreases slow-motion speed.

STOP•EJECT A single press of this button stops normal VCR functions such as record, playback, rewind, fast-forward, or pause. If pressed a second time, this button ejects the loaded tape.

TV•VCR Switches the picture signal so that it either comes from the VCR or the TV cable/antenna signal.



Display Panel

Clock/Counter Displays current time, time counter, tape speed, or channel numbers when switching channels.

FUNCTION DISPLAYS:

dn & Ld (Down and Load) Front panel display alternates between these two words when time data is being downloaded.

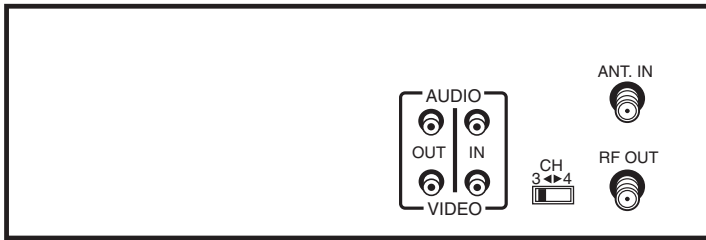
REC (Recording indicator) The VCR is recording. REC flashes on the front panel display when a recording is paused.

⌚ (Timer indicator) Displayed when an Express Recording (XPR) or timer recording is under way or when the VCR is set for a timer recording and the power is tuned OFF. *TIMER* flashes on the VCR front panel when a timer recording is set and no tape is inserted in the VCR.

VCR indicator Indicates that the VCR is in VCR-display mode. Press the TV•VCR button to toggle between VCR and TV viewing modes.

- VCR indicator is ON when the picture displayed is from the VCR's tuner
- VCR indicator is OFF when the picture displayed is from the TV's tuner

Other Information



Back Panel

ANT. IN jack Receives an antenna or cable system signal when the VCR is attached using RF coaxial cables.

AUDIO and VIDEO IN jacks Receives signals from another component (such as a VCR or camcorder) when connected to these jacks. Use the INPUT button on the VCR remote control to select the video line input (L1) and record from these jacks.

AUDIO and VIDEO OUT jacks Sends signals from the VCR to another component (like a TV or VCR), when connected to these jacks.

CH. 3/4 switch Determines the channel which the TV must be tuned to in order to see the VCR's picture. Not used when connecting the VCR to the TV using Audio/Video cables.

RF OUT jack Passes the VCR's signal to the TV using the supplied RF coaxial cable.

RCA VCR Limited Warranty

What your warranty covers:

- Any defect in materials or workmanship.

For how long after your purchase:

- 90 days for labor charges.
- One year for parts.

The warranty period for rental units begins with the first rental or 45 days from date of shipment to the rental firm, whichever comes first.

What we will do:

- Pay any Authorized RCA VCR Service Center the labor charges to repair your VCR.
- Pay any Authorized RCA VCR Service Center for the new or at our option, refurbished replacement parts required to repair your VCR.

How you get service:

- Take your VCR to any Authorized RCA VCR Service Center To identify your nearest Authorized RCA VCR Service Center, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
- Show the Authorized Service Center Representative your evidence of purchase date or first rental.
- Pick up your VCR when repairs are completed.

What your warranty *does not* cover:

- Customer instruction. (Your Owner's Manual clearly describes how to install, adjust, and operate your VCR. Any additional information should be obtained from your dealer.)
- Installation and related adjustments.
- Signal reception problems not caused by your VCR.
- Damage from misuse or neglect.
- Cleaning of video/audio heads.
- Batteries.
- A VCR that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- A VCR purchased or serviced outside the U.S.A.
- Acts of nature, such as but not limited to lightning damage.

Product Registration:

- Please complete and mail the Product Registration Card packed with your VCR. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

How State Law relates to warranty:

- This warranty gives you specific legal rights and you also may have other rights that vary from state to state.

If you purchased your VCR unit outside the United States:

- This warranty does not apply. Contact your dealer for warranty information.

Service calls which do not involve defective materials or workmanship are not covered by this warranty. Costs of such service calls are the sole responsibility of the purchaser.

How to Find the TV's Video Line Input

You need to tune your TV to the video line input if you are using the VCR's Audio/Video (A/V) OUT jacks to connect to the TV's A/V input jacks. You must select the TV's video line input before you can see the VCR's menus, the cable/antenna reception, and the content that's on a tape.

The video line input for TVs varies by brand and model. Below are some steps to try to find your TV's video line input:

- If your TV brand is RCA, GE, or Poscan, press the TV button on the VCR's remote control, then press the INPUT button.
- If you have another brand of TV see the chapter *Using the Remote Control* to see if the VCR's remote can be programmed to control your TV. If so, once completed, follow the step above.

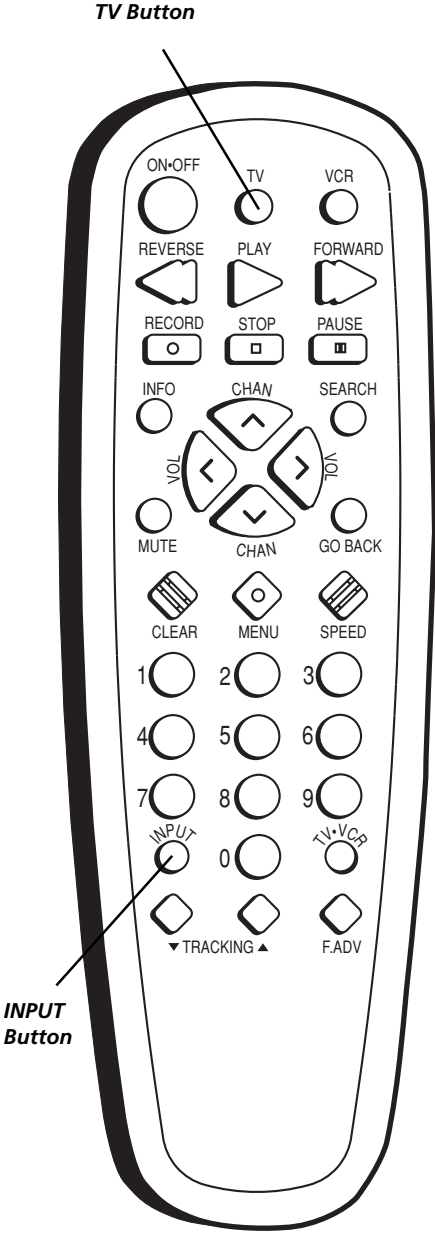
If those options do not work, try the following ideas. You might access the video line input by:

- Pressing a button on the TV's remote control (see the table below).
- Selecting a specific channel from the TV's on-screen menu system (see the table below).
- Tuning directly to the video line input by selecting a specific channel number (see the table below)
- Going through all available channels by pressing the channel up or down buttons on the TV or its remote control.

Common Video Line Input scenarios:

Video Input Channel Variations

Button/Switch on the TV	Button on the TV Remote	Channel Number
VIDEO	VID 1	00
SIGNAL	LINE	90
VID 1	VID	91
VID 2	VIDEO	92
S-VID	S-VID	93
S-VIDEO	INPUT	VID 1
	S-VIDEO	VID 2
	SOURCE	
	AUX	



Advanced Connection

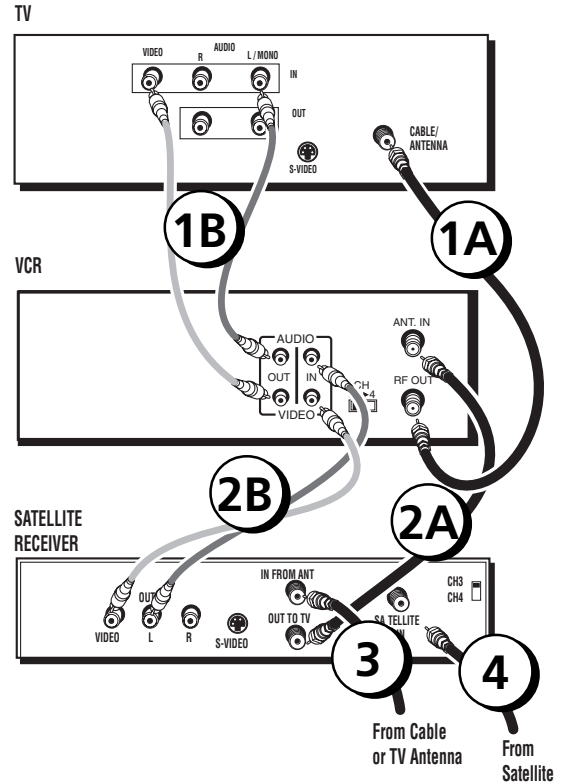
TV + VCR + Satellite Receiver

– Cables: A/V and RF Coaxial

Note: Your satellite receiver and television back panels may not look exactly like the models shown here. This connection can also be used for a cable box.

1. Connect the VCR to the TV

- A. Connect one end of the supplied RF coaxial cable to the RF OUT jack on the back of the VCR and the other end to the TV's antenna input jack.
- B. Connect the A/V cables. Connect an audio cable to the VCR's Audio OUT jack and the other end to the TV's corresponding audio input jack (if your TV has more than one audio input jack, use the L channel jack to make the connection). Connect one end of the video cable to the VCR's VIDEO OUT jack, and the other end to the TV's video input jack.



2. Connect the satellite receiver to the VCR

- A. Connect one end of a second RF coaxial cable (not included) to the VCR's ANT. IN jack. Connect the other end to the satellite receiver's antenna output jack.
- B. Connect the A/V cables. Connect an audio cable to the VCR's Audio IN jack and the other end to the satellite receiver's audio output jack (if your satellite receiver has more than one audio out jack, use the L channel jack to make the connection). Connect one end of the video cable to the VCR's VIDEO IN jack, and the other end to the receiver's video output jack.

3. Connect a TV antenna or cable feed to the satellite receiver

If you have cable or a standard TV antenna, connect its RF coaxial cable (not included) to the antenna input jack on the satellite receiver.

4. Connect the satellite antenna's cable to the satellite receiver

Connect the satellite antenna's RF coaxial cable feed (not included) to the receiver's satellite input jack.

Other Information

Glossary

A/V Jacks & Cables Commonly called “RCA-type” cables. Improves picture and sound quality over RF Coaxial cables.

EnergySaver Automatically turns the VCR off after a user-defined period of inactivity.

Express Recording (XPR) A method of timer recording which tapes for a set period of time using 30-minute increments.

Pro-Tect Plus™ Allows the VCR to be disabled so that the front panel and remote control buttons don't work. Useful for protecting timer recordings.

QuickSet Guide An first-time use, interactive, menu-based system that walks you through several setup steps in a series of questions. The QuickSet Guide is also available in the VCR's Main Menu.

VCR Channels List The active list of channels available to the VCR using the CHANNEL +/- buttons.

XPR See *Express Recording* above.

A

- ADD/REMOVE CHANNELS screen 18
- AUDIO IN jacks 53
- Audio/Video (A/V) jacks 17, 50
- Auto channel search 17
- Auto clock feature 19
- Auto play feature 13, 21
- Auto TV/VCR feature 21
- Automatic rewind 13
- Automatic tracking 13, 41

B

- Back panel jacks 50
- Basic
 - connections 8
- Basic recording 13
- Batteries for the remote 11

C

- Cable box setup 16
- Cables
 - positioning 6
- CHANNEL buttons 17, 26, 48
- Channels, adding/removing 18
- CHANNELS menu 16, 18, 35
- CLEAR button 26, 39, 41
- Clock display 49
- Connections 8
- Controls
 - back panel 50
 - front panel 48
- Copying and editing tapes 38

D

- Date and time setting 19
- Design specifications 47
- Display panel 49
- Displays, on screen 42

E

- EJECT button 13
- EnergySaver feature 22
- Express Recording (XPR) 1, 32

F

- F. ADV button 39
- FORWARD button
 - 13, 26, 38, 40, 41
- Frame advance 39
- Front panel controls 48
- FWD button 38, 40, 41, 48

G

- GO BACK button 26

I

- Index search 39
- Indicators in display panel 49
- INFO button 41
- INPUT button 33, 38, 52

L

- L1 indicator 38
- L2 indicator 38
- LANGUAGE menu 16
- Locking feature 40

M

- MENU button 16, 33, 35
- MUTE button 27

N

- Number buttons 20, 26

O

- ON•OFF button 40
- On-screen displays 42
- Overheating 6

P

- PAUSE button 13, 27, 38, 39
- Picture search options 38
- PLAY button 13, 27, 38
- PLAY/PAUSE button 39
- POWER button 13
- Power surges 6
- PREFERENCES menu 20
- Pro-Tect Plus locking feature 40

Q

- QuickSet guide 16

R

- REC display 49
- RECORD button 13, 32, 48
- Recording
 - basic 13
 - copying and editing tapes 38
 - Express (XPR) 1, 32
 - speeds 22, 24
 - timer 33
- Remote, batteries 11
- Removing/adding channels 18
- REV button 38, 48
- REVERSE button 13, 27, 38, 40
- Reviewing timer programs 33
- Rewind, automatic 13

S

- Safety tab 13, 21
- Search
 - forward 38
 - reverse 38

SEARCH button 39
Set up
 auto play feature 21
 auto TV/VCR feature 21
 cable box 16
 Daylight-saving 20
 front panel 22
 language feature 16
 PREFERENCES menu 20
 tape speed feature 22
 time and date 19
 time zone 19
 using menu system 16
Signal type
 changing 18
 selecting 18
Slow motion 39
Specifications 47
Speed
 SLP 22
 SP 22
SPEED button 13, 22, 32
Speeds, recording 22
STOP button 13, 27, 32, 38, 48

T

Tab, safety 13
Tape eject 13
Tape speeds 22
Time and date 19
Time counter 41
TIME menu 19
Time setting
 Daylight-saving 20
 set time zone 19
Timer programs
 clearing 33
 reviewing 33
Timer recording 33
 stopping 33
Tips, troubleshooting 44
Tracking 41

TRACKING buttons
 13, 27, 39, 41, 48
Troubleshooting 44
TV button 27, 52
TV•VCR button 21
TV's video input channel 52

V

VCR
 connecting 8
VCR indicator 49
VCR MAIN MENU 16, 19, 33
VCR Plus+ System
 channel list (Canada) 36
 channel worksheet 37
VCR viewing channel 11, 13
VOL+ button 27
VOL- button 27

This page intentionally left blank

Please do not send any products to the Indianapolis address listed in this manual or on the carton. This will only add delays in service for your product.

Thomson multimedia Inc.

10330 North Meridian Street
Indianapolis, IN 46290

©2001 Thomson multimedia Inc.

Trademark(s)® Registered

Marca(s) Registrada(s)

Printed in Korea

TOCOM 1570823B